Adult E-Poster

CONCLUSION
CME improved counselling rates in our clinics, but gaps in risk assessment persist. Implementing structured protocols in the future could further reduce risks during Ramadan fasting.

EP_A197

VALIDATION OF IDF-DAR RISK SCORE FOR FASTING IN RAMADAN FOR ADULTS WITH DIABETES MELLITUS IN PRIMARY CARE

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INTRODUCTION
Fasting during Ramadan is a religious obligation for Muslims but poses health risks for individuals with diabetes mellitus. The International Diabetes Federation–Diabetes and Ramadan Alliance (IDF-DAR) introduced a risk stratification tool in 2021 to guide clinicians, though its utility in primary care settings remains limited.

METHODOLOGY
We conducted a retrospective cohort study on adults with diabetes attending government health clinics in Malaysia from April 15 to June 15, 2024. Medical records of those who attempted fasting during Ramadan were reviewed. The primary outcome was a composite of hypoglycaemia, hyperglycaemia, diabetes-related hospitalization, or dehydration leading to breaking the fast. The discriminative performance of the IDF-DAR tool was evaluated using the area under the receiver operating characteristic curve (AUC). Calibration was assessed via the Hosmer-Lemeshow test.

RESULT
A total of 310 patients were included (99% with type 2 diabetes). The mean age was 61 years, and the median diabetes duration was 7 years. Adverse fasting outcomes were observed in 18.4% of patients, with hypoglycaemia being the most common (13.5%). The IDF-DAR risk stratification tool demonstrated good discriminative ability, achieving an area under the ROC curve (AUC) of 0.78 (95% CI: 0.72–0.84). At the recommended cut-off for distinguishing low-moderate from high-risk categories, the tool achieved a sensitivity of 92.9% and a specificity of 40.9%. The Hosmer-Lemeshow goodness-of-fit test indicated poor agreement between observed and predicted adverse outcomes, with a statistically significant result (p <0.05).

CONCLUSION
The IDF-DAR risk stratification tool identifies high-risk patients fasting during Ramadan in primary care. However, its poor calibration highlights the need to refine the model to improve its predictive accuracy. Enhancing the tool's calibration could allow for better individual risk estimation and more precise clinical decision-making in diverse primary care settings.

EP_A198

INCIDENCE OF HYPOGLYCEMIA FOLLOWING "INSULIN CHASE:" A SINGLE-CENTER CLINICAL AUDIT

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INTRODUCTION
Hyperkalemia poses a significant threat due to its potential to induce fatal cardiac arrhythmias. "Insulin chase," or a combination of intravenous insulin, calcium gluconate, and dextrose, is given to rapidly lower serum potassium levels. Potential risks of this regime include hypoglycemia. This study aims to determine the incidence of hypoglycemia following the administration of "insulin chase" in our center, explore associated risk factors, and assess adherence to blood glucose (BG) monitoring when this regime is administered.

METHODOLOGY
This was a retrospective observational study. Medical records of all adult patients who received insulin chase treatment at Hospital Putrajaya between January 1, 2023, and December 31, 2024, were retrieved and reviewed.

RESULT
A total of 187 patients received insulin chase during the study period. The mean age was 58 years (SD 15.9). The

majority were male patients (63.1%), and more than half (58.8%) had background diabetes mellitus. The incidence of hypoglycemia post-insulin chase was 16.6%. Patients who developed hypoglycemia had a significantly higher median creatinine level (678 umol/l vs. 349 umol/l, p = 0.005). Prior use of sulfonylurea was also significantly associated with an increased risk of hypoglycemia (26.3% vs. 8.8%, p = 0.031). Factors such as age, gender, race, presence of diabetes mellitus, and prior insulin use were not found to be significantly associated with the development of hypoglycemia. Almost one-quarter of patients (23.5%) did not have BG checked prior, and only 40.6% had BG monitoring planned post-insulin chase.

CONCLUSION

This audit demonstrated a 16.6% incidence of hypoglycemia post-insulin chase. Renal impairment and prior sulfonylurea use were significant risk factors. There is a need to improve the planning and implementation of pre- and post-treatment glucose monitoring to prevent hypoglycemia.

EP_A199

PRESCRIBING PATTERNS OF SGLT2 INHIBITORS IN TYPE 2 DIABETES MANAGEMENT AT A TERTIARY CARE CENTER IN MALAYSIA

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INTRODUCTION

Type 2 diabetes (T2D) continues to pose a significant public health challenge in Malaysia, affecting approximately 20% or 4.4 million adults. Among the newer treatment options, sodium-glucose co-transporter-2 inhibitors (SGLT2-i) have gained increasing attention due to their proven glycaemic and cardiorenal benefits. Despite the increasing adoption of SGLT2-i due to established glycaemic and cardiorenal benefits, Malaysia-specific prescribing patterns remain understudied, particularly in tertiary healthcare environments. This study aimed to evaluate the prescribing patterns of SGLT2-i and its relationship with antidiabetic utilization in T2D patients at Hospital Kuala Lumpur.

METHODOLOGY

This retrospective cohort study used patient data from the Pharmacy Information System (PhIS) and Lab Management System (LMS). Patients aged 18–70 years diagnosed with T2D and prescribed empagliflozin or dapagliflozin between January - December 2023 were included. Data on demographics, initiation date of SGLT2-i, medication history, and HbA1c levels were extracted. Adherence to prescribing guidelines was assessed by comparing initiation criteria, dosing, and drug combinations against recommendations outlined in the Malaysian Clinical Practice Guidelines (6th edition). Medication adherence was measured using the Medication Possession Ratio extracted from PhIS. HbA1c levels before and after SGLT2-i treatment in adherent patients were compared using the Wilcoxon signed-rank test, with a significance level set at 0.05.

RESULT

Among the 256 patients analyzed, 77.3% of prescriptions adhered to national guidelines, with excellent dose compliance (97.3%). Combination therapy was predominant (98%), with metformin (82%), vildagliptin (54%), and gliclazide (20%) most frequently prescribed concurrently. Additionally, 60.2% received insulin concurrently with SGLT2-i. Notably, adherent patients experienced significant HbA1c reductions from a median baseline of 7.5% to 7.2% post-treatment (p = 0.019).

CONCLUSION

SGLT2-i prescribing practices at HKL closely align with national guidelines, primarily involving combination therapy. The observed significant improvement in glycaemic control among adherent patients underscores the value of SGLT2-i in routine clinical management of T2D. Future research should focus on long-term clinical outcomes and economic implications of widespread SGLT2-i use.

EP_A200

EFFECTS OF SODIUM-GLUCOSE COTRANSPORTER-2 INHIBITORS ON HEMATOCRIT AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS: A TERTIARY CENTER EXPERIENCE

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INTRODUCTION

Sodium-glucose cotransporter-2 inhibitors (SGLT2i) have become integral to managing Type 2 Diabetes Mellitus (T2DM) due to their cardiorenal benefits. They promote osmotic diuresis, leading to hemoconcentration and increased erythropoiesis, which may theoretically raise